Serial No.: 10/600,332

Atty. Docket No.: P68917US0

IN THE CLAIMS:

Please revise the set of pending claims as set forth herein.

1. (Original) A method for forming a device isolation film, comprising the steps of:

(a) sequentially forming a pad oxide film and a pad nitride film on a

semiconductor substrate;

(b) selectively etching the pad nitride film to form a nitride film pattern;

(c) etching the pad oxide film and a predetermined thickness of the

semiconductor substrate using the nitride film pattern as a hard mask to form a trench;

(d) forming a thermal oxide film on the surface of the trench;

(e) performing an annealing process under NH₃ atmosphere to form an oxide

nitride film on the surface of the thermal oxide film;

(f) forming a liner nitride film on the entire surface;

(g) forming an oxide film filling the trench on the entire surface; and

(h) performing a planarization process.

2. (Original) The method according to claim 1, wherein the step (e) comprises a

plasma NH₃ nitridation or a thermal NH₃ nitridation.

3. (Original) The method according to claim 1, wherein the step (e) is performed at

a temperature ranging from 600 to 900°C.

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4. (Original) The method according to claim 1, wherein the step (e) is performed at a pressure ranging from 5 mTorr to 200 Torr.

- 5. (Original) The method according to claim 1, wherein the steps (e) and (f) are performed under in-situ, in-chamber or cluster condition.
- 6. (Original) The method according to claim 1, wherein the step (f) is performed in a LPCVD furnace or a LPCVD single chamber.
- 7. (Original) The method according to claim 6, wherein the step (f) is performed at a temperature ranging from 600 to 900°C.
- 8. (Original) The method according to claim 6, wherein the step (f) is performed at a pressure ranging from 0.1 to 10 Torr.
- 9. (Original) The method according to claim 6, wherein the step (f) is performed using one or more gases selected from the group consisting of SiH_4 , $SiC1_4$ and SiH_2C1_2 as silicon source gases, and using one or more gases selected from the group consisting of NH_3 and N_2 as nitrogen source gases.

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10. (Original) The method according to claim 9, wherein the supply ratio of nitrogen source gas to silicon source gas is $1: 1 \sim 20: 1$.

11. (Currently Amended) The method according to claim l, wherein the step (f) further comprises the step of forming a <u>said</u> thermal oxide film on a liner nitride film and performing an <u>additional</u> annealing process.

12. (Withdrawn) A semiconductor device fabricated by the method of Claim 1.